

YORK UNIVERSITY Faculty of Arts

Final Examination December 12, 2007

Economics 4070.03AF : Public Finance I S. Bucovetsky

time=2 hours

The exam contains two sections, *A* and *B*. Section *A* is worth 40 % of the marks, section *B* 60 %. Note that there is some choice in each section.

A : 40 % (5 % per question)

Explain **briefly** the significance for the economics of taxation of any **8** of the following 10 terms.

1. output effect of a specific (partial) factor tax
2. lifetime tax incidence
3. equi-proportional Ramsey tax rule
4. flat (single bracket) income tax
5. comprehensive (“Haig–Simons”) income
6. accrued capital gains
7. clawback of tax credits
8. income effect of the taxation of savings
9. capital cost allowance
10. transfer pricing

continued

B : 60 % (15 % per question)

Answer any 4 of the following 8 questions.

1. What, if anything, do general equilibrium models of tax incidence contribute to the analysis of the burden of Canada's corporate income tax?

2. Calculate, as precisely as possible, the excess burden of a 50 percent wage income tax on a person whose preferences can be represented by the utility function

$$U(X, H) = X - \frac{H^2}{6}$$

where X is her consumption of goods and H the number of hours she works per week, if her wage (before taxes are deducted) is \$20 per hour?

3. What is the relation between the optimal tax rate on clothing, and the optimal tax rate on food, for a person whose preferences can be represented by the utility function

$$U(S, C, F) = S + 2\sqrt{C} + \ln F$$

where S is her consumption of shelter (which is not taxed), C her consumption of clothing, and F her consumption of food?

4. Outline the main respects in which the return to owner-occupied housing is treated differently in the Canadian personal income tax than it would be treated using the Haig-Simons (or "comprehensive") definition of taxable income.

continued

5. What are the advantages and disadvantages of the following three systems for eligibility for a social assistance programme (such as child benefits)?

i Only people whose income is below some threshold level of income are eligible ; people whose income exceeds the threshold are not eligible for any of the benefits.

ii People whose income is below some threshold level of income are eligible for full benefits ; people whose income exceeds the threshold have their benefits reduced ; the amount by which benefits are reduced is proportional to how much the person's income exceeds the threshold level.

iii Everyone is eligible for full benefits, regardless of income.

6. How does the effective marginal tax rate vary with the taxpayer's income, if the taxpayer is a single parent with one child, under an (imaginary) income tax system with the following rules? :

- the basic tax rate is 25 percent
- each individual gets a **non-refundable** tax credit of \$4,000
- there is a **non-refundable** tax credit of \$10,000 for each child of a single parent
- if the taxpayer's income is greater than \$60,000, then this child tax credit is reduced by 20 cents for each dollar of income in excess of \$60,000
- the child tax credit cannot be negative
- all income over \$100,000 is subject to an additional tax, equal to 20 percent of any income in excess of \$100,000

7. Does the current Canadian personal income tax reduce significantly the amount of saving done by Canadian taxpayers? Explain briefly.

8. What system of tax relief should be offered on foreign taxes paid by a foreign subsidiary of a multinational corporation, in order to maximize the total net income of the home country of the parent corporation? Explain briefly.